

Remarks

In the Office Action dated August 25, 2004, claims 1-10 were pending in the application. In the Office Action, the Examiner:

objected to the citation of the "French Search Report" in the Information Disclosure Statement dated August, 19, 2003;

objected to the use of the phrase "the invention relates to" in the Abstract;
rejected claims 1, 2, 5, 6, and 8-10 under 35 USC § 102 as being anticipated by de Lange (U.S. Patent No. 4,488,739);

rejected claim 3 under 35 USC § 103 as being obvious in view of de Lange;

rejected claim 4 under 35 USC § 103 as being obvious in view of de Lange in combination with Lever (U.S. Patent No. 5,988,689); and

indicated that claim 7 contains allowable subject matter.

Applicant acknowledges the Examiner's indication of the allowability of claims 7, but chooses not to rewrite claim 7 in independent form at this time.

Applicant acknowledges the Examiner's indication that it is not proper to list the "French Search Report" on the Form PTO 1449. However, since Applicant had individually listed on the Form PTO 1449 all of the documents listed in the French Search Report, Applicant remains in compliance with his duty to disclose.

Applicant has amended the Abstract to remove the offending language.

Claims 1, 2, 5, 6, and 8-10 were rejected as being anticipated by de Lange. Claim 1 recites, among other things, a spacer having a split sleeve of high-compressibility cellular material and a sheath of heat-shrink plastics material surrounding the split sleeve at least as far as the end edges thereof, the sheath being partially shrunk on the split sleeve so as to hold the split sleeve in the open state for putting the spacer into place on a tubular element.

De Lange discloses an insulating pipe part for use with a branch pipe joint (T-joint). A T-shaped insulating pipe part 1 is placed around the pipes 9, 10 and 19, which form the T-joint. The T-shaped insulating pipe part 1 has a slit 5 along the length of the top of the T-shape to allow for pushing the pipe part 1 over pipes 9 and 10. Polyurethane foam pockets 22 are integrally formed with and surrounded by the walls of insulating pipe part 1. Insulating pipe part 1 is formed of a relatively stiff polyethylene. Indeed, de Lange discloses that "in order to bend the insulating pipe part section 2 and 3 outwardly along slit 5, the walls 23 and 24 of the insulating pipe parts 2 and 3 must be thin." [col. 3, lines 25-27.] The walls of the insulating pipe part sections 2, 3 and 4 may include a polyurethane foam plastic 22 enclosed within walls 21 and 21a of the insulating pipe part sections. De Lange fails to disclose any particular properties regarding the polyurethane foam plastic 22. Heatshrinking sleeves 6 and 7 seal the joints between insulating pipe part 1 and pipes 9 and 10, and also seal the slit in insulating pipe part 1.

The Examiner asserts that de Lange's insulating pipe part sections are of a high-compressibility cellular material 22 (see FIGS. 4 and 5). We disagree—de Lange fails to disclose a sleeve of high-compressibility cellular material. First, as noted above, insulating pipe part sections 2 and 3 of de Lange are formed of a relatively rigid polyethylene (requiring thin walls to allow for bending). Second, the polyurethane foam pockets 22 of de Lange have not been disclosed as being of a high-compressibility cellular material—indeed, de Lange has not disclosed any particular material properties for the polyurethane foam. Third, de Lange fails to teach or suggest to a person of ordinary skill in the art that foam 22 would or should have a high-compressibility or any particular compressibility, for that matter. De Lange teaches that foam 22 is surrounded by relatively rigid polyethylene walls of insulating pipe parts 2 and 3—in other words, de Lange teaches that the compressibility or incompressibility of foam 22 is completely inconsequential to the invention of de Lange. Thus, de Lange fails to disclose, teach or suggest a “sleeve of high-compressibility cellular material,” as recited in claim 1.

De Lange also fails to disclose a sheath of heat-shrink plastics material surrounding the split sleeve at least as far as the end edges thereof, as recited in claim 1. The sheaths 6 and 7 of de Lange only surround the insulating pipe sections 2 and 3 at the two ends—the central portion of the split sleeve of de Lange is *not* surrounded by a sheath. Indeed, with the T-shaped arrangement of de Lange, it would be difficult to provide such a unique heat-shrinkable sleeve, an arrangement that is neither disclosed nor suggested by de Lange.

Even further, the Examiner asserts that de Lange discloses a sheath being partially shrunk on the split sleeve. We disagree. De Lange discloses that “sleeves 6, 7 are pushed over the insulating pipe part sections 2, 3 until their lower sleeve portions overlap each other” [col. 2, lines 50-52], that “the sleeves 6 and 7 are pushed over the section 2 and 3 until substantially abutting the third section 4” [col. 2, lines 67-68], and that “the sleeves 6, 7 and 12 consisting of a thermoplastic material, preferably polyethylene or polypropylene, are heatshrunk on the sections” [col. 3, lines 1-3]. De Lange completely fails to disclose that, after being placed over insulating pipe sections 2 and 3, sleeves 6 and 7 are partially shrunk on the split sleeve. There is absolutely no disclosure or suggestion that sheaths 6 and 7 should be shrunk in two stages. The Examiner also asserts that the sheath is partially shrunk on the split sleeve so as to hold said split sleeve in the open state for putting the spacer into place on the tubular element. Once again, we disagree. As noted above, de Lange discloses that sheaths 6 and 7 are not placed over the split insulating pipe sections 2 and 3 until after the split insulating pipe sections are placed around pipes 9 and 10. Therefore, sheaths 6 and 7 could not be used to hold a split sleeve in the open state for putting the spacer into place on the tubular element. Indeed, if sheaths 6 and 7 were placed over insulating pipe sections 2 and 3 prior to placing sections 2 and 3 over pipes 9 and 10, sheaths 6 and 7 would actually prevent the placing of sections 2 and 3 over pipes 9 and 10. Thus, de Lange fails to disclose or teach a sheath being partially shrunk on the split sleeve so as to hold the split

sleeve in the open state for putting the spacer into place on the tubular element, as recited in claim 1.

De Lange fails to disclose each and every element of claim 1, and therefore, de Lange fails to anticipate claim 1. Claims 2, 5, 6 and 8-10 depend from claim 1 and contain additional recitations thereto. Therefore, for at least all of the reasons discussed above, de Lange fails to anticipate claims 1, 2, 5, 6 and 8-10.

The Examiner also rejected claim 3 as being obvious in view of de Lange. Claim 3 recites, among other things, that the sleeve presents a slot that extends obliquely or helically. The Examiner asserts that changing the shape of the slot from an axial slot to a helical slot would have been obvious to a person of ordinary skill in the art. We disagree. Moreover, claim 3 depends from claim 1 and contains additional recitations thereto. As discussed above, de Lange fails to disclose each and every element of claim 1, and therefore, de Lange fails to disclose each and every element of claim 3. Therefore, for at least all of the reasons discussed above, de Lange fails to anticipate claim 3.

Claim 4 was rejected as being obvious in view of de Lange in combination with Lever. Claim 4, which depends from claim 1, recites, among other things, that the partially-shrunk sheath stops at the end edges of the split sleeve. The Examiner indicates that de Lange fails to disclose that the sheath stops at the edges of the split sleeve, but that Lever discloses such a feature. Lever fails to disclose a split sleeve, and thus, Lever fails to disclose a spacer having a split

sleeve of high-compressibility cellular material and a sheath of heat-shrink plastics material surrounding the split sleeve at least as far as the end edges thereof, the sheath being partially shrunk on the split sleeve so as to hold the split sleeve in the open state for putting the spacer into place on a tubular element, as recited in claim 1. Therefore, Lever fails to cure the deficiencies of de Lange discussed above with respect to claim 1. The combination of de Lange and Lever fails to disclose, teach or suggest each and every element of claim 4, and thus, the combination of de Lange and Lever fails to render claim 4 unpatentable.

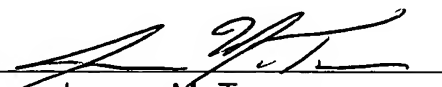
Applicants respectfully submit that claims 1-10 in the present application are in condition for allowance, and action to that effect is earnestly solicited.

Should the Examiner have any questions regarding the present application, Applicant respectfully requests that the Examiner contact Applicant's representative at the phone number listed below.

A check in the amount of \$120.00 is enclosed to cover fees for a one-month extension of time. If additional fees are due, Account No. 13-0235 maintained by Applicant's attorney may be charged.

Respectfully submitted,

By



Jeanne M. Tanner
Registration No. 45,156
Attorney for Applicant

McCORMICK, PAULDING & HUBER LLP
CityPlace II, 185 Asylum Street
Hartford, Connecticut 06103-4102
(860) 549-5290